



Department of Public Works
Solid Waste Management Administration
Solid Waste Education & Enforcement
Program (SWEEP)

202-645-8245
www.dpw.dc.gov



Recycling goes to camp

This summer, the D.C. Office of Recycling, which is part of the Department of Public Works, teamed up with the D.C. Department of Parks and Recreation to make recycling and environmental education part of 12 day camps throughout the District of Columbia. This summer program reinforces the learning that takes place in the classroom during the regular school year.



Recycle it right!

Recycling is a little bit like homework—it's better to do it right than to do it fast! When you recycle, you provide a raw material for manufacturers. They take recyclables at their factories to make new products. They need the best recyclables they can get. So, when you recycle, be sure to do it right.

Only recycle the materials requested. Right now in our Residential Recycling program, the only materials that we accept are these:

- Metal food and beverage cans
- Newspaper
- Magazines and catalogs
- #1 (PETE) and #2 (HDPE) plastic containers with a narrow neck, such as bottles that held soda, juice, water, and shampoo and jugs that held milk and laundry detergent
- Glass bottles and jars that held food and drinks
- Corrugated cardboard boxes (the ones with the "wavy" middle layer)

When you put other items into recycling bins, someone has to pull them out and throw them away. Dumping non-recyclables into recycling bins makes recycling harder and makes it cost a lot more.

Know when and how to recycle.

Residential recycling collection is available to everyone who receives city trash services. This includes almost everyone who lives in buildings or houses with three or fewer units. Recycling is picked up at the same place as your family's trash and on the same collection day, unless you have twice-a-week collection. If you have twice-a-week trash collection, your recyclables are collected on the second collection day of the week. If you live in a building that has four or more apartments or condos, ask your building manager how and where you should recycle.

Prepare your recyclables properly.

Rinse bottles, cans, jugs, and jars. Remove and discard caps and lids. Flatten plastic containers and boxes. Make sure that paper is clean and dry.

Put trash in its place—the trash can!

Garbage should never be placed in recycling containers—whether those are curbside bins or drop-off containers. Food waste, greasy cardboard boxes, plastic containers that held oil, car parts, bricks and other building materials, old brooms, and paint cans don't belong in recycling bins.

Hazards at home?

Get rid of them the right way!

Some common household products can be dangerous if they are placed in the trash or poured down the drain. To help residents get rid of products safely, we hold Household Hazardous Waste and Electronics Recycling events twice a year, in the spring and the fall. Materials that are accepted include:

- Paint, stain, and paint thinner
- Weed and bug killers
- Fertilizer and plant food
- Household and auto batteries
- Used motor oil and oil filters
- Antifreeze and other automotive fluids
- Cleaners
- Pool, photo, and hobby chemicals
- Fluorescent light tubes
- Mercury and mercury-containing products
- Home electronics, such as computers, TVs, VCRs

For more information, visit our website, www.dpw.dc.gov.



In April, we had our spring Household Hazardous Waste and Electronics Recycling event at the Carter Barron Amphitheater. The event was a big success—1,040 cars dropped off household hazardous waste for safe disposal and 407 cars delivered used electronics for recycling. Thanks to everyone who participated! See you at our next event in the fall.

Are hazards lurking in your computer?

During the years that you own and use your computer, it poses no great hazard to you and your family. Unless, of course, you drop a laptop on your foot or pinch your finger under the CPU tower while housecleaning.

No, the hazards lurking in your computer have little to do with its use and everything to do with its disposal. If computers are disposed in the wrong ways or in the wrong places, they can introduce pollutants and toxins into the environment.

At the end of their useful lives, computers become e-scrap. E-scrap includes about 1,000 distinct substances. Some of these, such as gold, silver, copper, platinum, palladium,

steel, and aluminum, pose no particular risk and give non-reusable equipment some value. But e-scrap also contains potential pollutants, such as lead, mercury, cadmium, arsenic, selenium, beryllium, barium, and brominated flame retardants. These heavy metals and toxins have been linked to a variety of maladies, including asthma, organ dysfunction, reproductive disorders, brain damage, and cancer.

That's why it is so important that you reuse, recycle, and properly dispose of all e-scrap, including computers and other related home electronics, such as televisions, VCRs, video cameras, hand-held games, and other small electronic devices.

Drop-off Recycling

You can also recycle at these drop-off centers. Some of these sites accept materials that are not accepted in D.C.'s Residential Recycling program. Before delivering any recyclables to these locations, call for a complete list of materials accepted and preparation instructions.

- ABC Salvage
65 N St., SE
202-488-7850
Open: Mon. – Fri., 8 a.m. – 4:30 p.m.; Sat., 8 a.m. – 2 p.m.

- Eagle Environmental Services, Inc.
6130 North Capitol Street, NW
202-291-0200
Open: Mon. – Fri., 7:30 a.m. – 4:00 p.m.

- Super Salvage
1711 First Street, SW
202-488-7157
Open: Mon. – Fri., 7 a.m. – 4 p.m.; Sat., 7 a.m. – noon

- James Taylor Trash Service
5201 Hayes Street, NE
202-547-5905
Open: Mon. – Fri., 8 a.m. – 4:30 p.m.

Back to school

We want to thank these schools that are doing a great job recycling:

- Murch Elementary School
- Janney Elementary School
- Oyster Elementary School
- Deal Junior High School

Computer makers get into recycling act

The International Association of Electronics Recyclers estimates that by 2010 about 1 billion personal computers will have become obsolete. Computer makers have worked rapidly over the past 20 years to create machines and software that do more and do it faster. However, these same manufacturers have often been criticized for failing to take responsibility for the growing volume of obsolete products at the end of their useful lives. Consumers and communities have been forced to step in and deal with these often hard-to-handle discards. But now, computer manufacturers are trying to take more responsibility for the older systems that their new equipment is replacing.

Several computer manufacturers are now offering recycling programs to customers. Generally, they allow consumers to recycle any brand of equipment. In some cases, they offer rebates or trade-in discounts toward the purchase of new products.

The Dell Computer Corporation has a new home computer pickup program. The company recently began accepting requests to pick up used computers at consumers' homes and kicked off a free printer recycling program. Dell Recycling allows customers to order home pickups of old computer equipment for \$15 per unit (up to 50 pounds). The service is available for all brands of computers and does not require the purchase of a Dell system. The company also has begun allowing customers who buy a new Dell printer to recycle their old printer at no cost. For customers looking to upgrade, check out the TradeUps@DellExchange program. Through this program, customers receive credit toward new equipment for old equipment to be recycled.

When customers plan to purchase a new Gateway PC or other products, they are able to recycle old equipment from any manufacturer with Gateway. Under the Gateway Trade-in program, customers are issued a rebate check after the old equipment is shipped and the new equipment is purchased.

Hewlett-Packard (HP) recycling centers have already processed more than 4 million pounds of computer-related equipment returned by customers or used in HP's business. HP's recycling program offers recycling for any brand of personal/office computer equipment and peripherals, including printers, scanners, fax machines, personal computers, desktop servers, monitors, and handheld devices, along with external components such as cables, mice, and keyboards. The cost of HP's computer hardware recycling service ranges from \$13 to \$34 per item, depending upon the type and quantity of hardware to be returned. HP also offers a trade-in program. When you upgrade your equipment under this program, HP gives you the value of your current equipment and lets you apply it toward the purchase of new HP products.

Through the IBM PC Recycling Service, consumers and small businesses can recycle any brand of PC, including system units, monitors, printers, and attachments for \$29.99. IBM PC Recycling Service will either recycle the equipment or refurbish the system and arrange for its donation to Gifts in Kind International. If the computer meets the donation criteria, the donor will receive a receipt and may be eligible for a federal tax deduction. When buying a new IBM PC system, customers may purchase this service for old equipment, or it can be ordered separately by calling 1-888-SHOP-IBM.

Waste equals food

In *Cradle to Cradle: Remaking the Way We Make Things*, pioneering architect William McDonough and industrial chemist Michael Braungart challenge the concept of waste. Noting that there is no such thing as "waste" in nature, they write, "To eliminate the concept of waste means to design things—products, packaging, and systems—from the very beginning on the understanding that waste does not exist."

There is no waste in nature, because waste becomes food. Gardeners recognize this fact when they make and use compost, or decomposed plant matter, to feed new plant growth. We can learn even more when we study how ants succeed in building elaborate zero-waste communities. "They are a good example of a population whose density and productiveness are not a problem for the rest of the world, because everything they make and use returns to the cradle-to-cradle cycles of nature. All their materials, even their most deadly chemical weapons, are biodegradable, and when they return to the soil, they supply nutrients, restoring in the process some of those that were taken to support the colony."

McDonough and Braungart contrast this natural process with our current system of production that seeks to merely reduce the environmental impacts of thousands of industrial products, decrease the production of useless waste, and put smaller amounts of valuable materials into holes all over the planet, where they can never be retrieved.

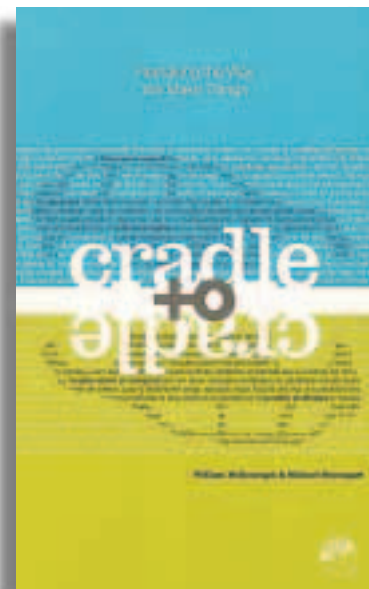
Rather than continuing to focus on a system that merely emphasizes the "less bad," they propose that manufacturers, chemists, and product designers rethink their products and processes. The goal—waste that becomes food.

"Products can be composed either of materials that biodegrade and become food for biological cycles, or of technical materials that stay in closed-loop technical cycles, in which they continually circulate as valuable nutrients for industry. In order for these two metabolisms to remain healthy, valuable, and successful, great care must be taken to avoid contaminating one with the other. Things that go into the organic metabolism must not contain mutagens, carcinogens, persistent toxins, or other substances that accumulate in natural systems to damaging effect."

Today, products that are no longer wanted can be a burden to the customer. McDonough and Braungart's design work and their book *Cradle to Cradle* add to a growing consensus that customers and the planet should not be burdened with these leftovers. Instead, products should be redesigned so that reuse and recycling are part of the plan. When reuse and recycling are part of the product or package design, the materials don't have to be downgraded with each reuse. Instead, we can have true closed-loop recycling systems, where products are turned back into the same item for another use, or upcycling, where the products go on to a higher and better use.

In the meantime, customers can begin to look at more items as "products of service." Rather than purchasing a computer or new carpet, a consumer might lease the use of that product during its expected life. At the end of that term of service, the manufacturer provides an upgrade or replacement and the original product returns to the biological or technical cycle for reuse and recycling.

While we are a long way from reaching McDonough and Braungart's goal, it is important to begin the process of looking at all "waste" materials to see if they can be designed as food for either a composting or a closed-loop industrial system.



Mannequin Madness

In the past, an old mannequin was often a trashed mannequin, but Judi Henderson's business, Mannequin Madness, is changing all that. In fact, during one six-month period, Mannequin Madness kept 100,000 pounds of mannequins from heading to disposal facilities.

The business, which is located in California, takes used mannequins, dress forms, and torsos and resells or rents them to retail stores, companies needing "models" for trade show displays, theater groups, and artists. Mannequin Madness, which operates out of its founder's basement, is now home to more than 500 mannequins, forms, and torsos. Each week as many as 50 are rented or sold. The purchase price for a used mannequin is about half the normal retail price for a new one. Henderson also sells mannequin floral sculptures that are used as window displays or enjoyed as artwork.

For more information, visit www.mannequinmadness.com or call 510-444-0650.



For more information, visit these websites:

Dell Computers

www.dell4me.com/recycling

www.dell.tradeups.com

www.dell.com/assetrecovery (Businesses only)

Gateway

www.gateway.tradeups.com

Hewlett-Packard

www.hp.com/hpinfo/globalcitizenship/environment/recycle/index.html

IBM

www.ibm.com/ibm/environment/products/pcrservice.shtml

Sports recycling focuses on fans

Fans at big-time sporting events are getting more opportunities to recycle. And considering that fans generate as much as three to five pounds of trash during these events, that's a good thing!

NASCAR, with the help of Coca-Cola, Anheuser-Busch, and the National Association of PET Container Resources, launched "Rev It Up & Recycle" at the Texas Motor Speedway this spring. The recycling program targeted two types of beverage containers: plastic bottles and aluminum cans. Among the recycling collection containers were 30 NASCAR-themed kiosks. Recyclers were given the chance to win Dale Earnhardt, Jr. merchandise.

This followed a 2001 recycling event held at the Atlanta Motor Speedway. Sponsors hope that recycling will soon become commonplace at tracks across the country.

Four Major League Baseball teams provide fans with beverage container recycling. Last season, the Colorado Rockies, Milwaukee Brewers, Minnesota Twins, and Seattle Mariners recycled a total of 2,907,103 plastic beverage bottles. Many other teams recycle cardboard and other materials generated at concession stands, as well as some of the items picked up by stadium cleanup crews.



Do we really need disposable DVDs?

Remember those *Mission: Impossible* tapes that would self-destruct. A digital video disc manufacturer is working to develop a disposable DVD that does just that. Once the package is opened, the DVD would work just like a normal DVD for 48 hours. But after 48 hours, exposure to air would cause the DVD to turn black and become unreadable to the laser in a DVD player.

If they make it to consumers, these self-destructing DVDs would be marketed as an alternative to rentals that must be returned and to movies that are purchased and kept. Either way, they replace a durable and reusable item that can be shared and enjoyed by many people at many different times. And worse, they replace it with a disposable product with a very short shelf life and a chemical coating.

When you are looking at DVDs, stick with reusables.

Habitat building greener homes



Habitat for Humanity's Environmental Initiative is working through a Green Team to train local affiliates in sustainable building practices. These practices include resource efficiency, construction materials conservation, energy efficiency, and environmental sensitivity.

In constructing Habitat homes, resource efficiency and construction materials conservation result from planning ahead so that the minimum possible amount of materials are ordered and purchased, cutting down on waste at the site and cost for the project. In addition, it may involve using secondhand or incorporating overstock materials into the project instead of "new" materials. Across the country, Habitat affiliates are helping expand materials conservation and reuse beyond Habitat-constructed homes through ReStores, which collect and

sell used and surplus building materials and fixtures.

Energy efficiencies built into the design, from passive solar heating to proper insulation to the use of whole-house fans, don't just help the environment. These improvements also make the homes more economical for the residents who purchase them. One Habitat affiliate in the northern U.S. found that they were able to keep heating bills down to around \$20 to \$30 per month—about one-tenth of what these new homeowners paid in the rental properties where they'd lived before.

Since it was founded in 1976, Habitat for Humanity has built 125,000 homes in 3,000 communities located in 87 countries. For more information about Habitat and its environmental programs, visit www.habitat.org/env/.

The power of cooking oil

On May 19th, after buying an old school bus and converting it to bio-fuel, 13 Middlebury College students left Vermont heading south on a cross-country trip that eventually took them to Washington state, their final destination. The source of their bio-fuel—vegetable-based cooking oil, most of it from restaurants.

The students, who dubbed their endeavor "Project Bio-Bus" and proudly painted "Powered by Veggie Oil" on its rear, set out with several goals in mind.

First, they hoped to raise awareness about alternatives to fossil fuels. By converting a diesel-fuel operated bus to a bio-fuel bus, a process that took the students only about three weeks, they were able to demonstrate that alternative fuels are already available and don't necessarily require a huge lifestyle change from their users.

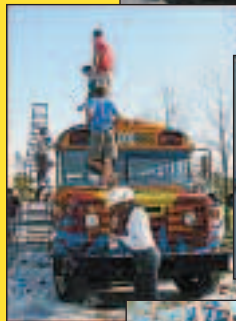
Second, the students wanted to demonstrate that bio-fuel results in greatly reduced harmful

emissions. For instance, carbon monoxide emissions are reduced by 43 percent, hydrocarbons by 56 percent, particulates by 55 percent, and sulfurs, a particular problem with petroleum-based diesel fuel, by 100 percent.

A third goal was to promote domestic farming operations that grow the crops that become cooking oils, as well as the U.S. companies that produce and use the oils.

Finally, by utilizing cooking oil as fuel, the bus takes a waste product and reuses it.

The downside of veggie oil fuel? The odor from the bus might make you hungry!



Read more about it!

www.projectbiobus.com

World's highest garbage dump cleaned up

By the mid-1990s, Mount Everest was home to about 1,000 tons of garbage that had been left behind by climbing expeditions. This garbage included oxygen bottles, food packets, tents, climbing gear, and more.

This year, as the world celebrates the 50th anniversary of the first successful summit attempt of Mount Everest, there is more to celebrate. Climbers have been working for years to haul down the trash that had accumulated at high elevations. This year, they've caught up, carrying down the last ton or so of debris.

The highest garbage dump in the world is now closed—and the world's tallest peak has been returned to its original glory.



Helping hands

SWEEP, the Solid Waste Education and Enforcement Program that is part of the D.C. Department of Public Works, sponsors the Helping Hands Neighborhood Clean-up Program. SWEEP provides the tools, including rakes, brooms, shovels, and bags, and residents (like you!) provide the helping hands.

Talk to your friends, relatives, and neighbors and get involved in this great program. For more information or to schedule a clean-up in your neighborhood, call 202-645-7190.



America Recycles Day is coming up soon!

Each year, our nation celebrates recycling on and around November 15, which is America Recycles Day. This fall, watch for more information about local activities or visit the website, www.americarecyclesday.org.

We want your suggestions, questions, and comments!

Solid Waste Management Administration

**3220 Pennsylvania Ave., S.E.
Washington, D.C. 20020**

202-645-8245

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70% POST-CONSUMER NEWS
CONTENT, USING SOY INKS**

***Please recycle this publication
after you have read it!***

Bulky waste? No problem!

To help residents dispose of bulky and hard-to-handle trash, the District of Columbia has a special bulk item collection program. These collections for appliances and other bulky items are done by appointment only.

As part of our bulk item collection program, we accept large items that should not be placed in your Supercan or Recycling bin. These include refrigerators, air conditioners, ovens, washers, dryers, pianos, sofas, kitchen cabinets, and mattresses and box springs. Be sure to remove doors from refrigerators, freezers, and ovens so that children playing nearby cannot be trapped inside.

For each appointment made, you may only place five bulk items out for collection. Place bulk items out no sooner than 6:30 p.m. on the day before your scheduled appointment day.

To schedule an appointment or for additional information, an adult member of your household must call 202-727-1000.



When garbage goes away

What happens to the garbage picked up at your curb every week? Have you ever wondered about that? You package your garbage and set it out at least one morning a week. When you get home, it's gone.

First, your trash gets put into a truck and mixed with your neighbor's garbage. The special truck that picks up garbage is called a "compactor" because it smashes the trash. This pushes a lot of the air out of the trash so that it takes up less space. Basically, the truck does the same thing to trash that your foot might do to a plastic bottle or a fast food bag.

Next, the smashed (compacted) trash is delivered to a special facility, which is called a "transfer station," because the trash is transferred (moved) from one truck to another. At this facility, the trash-compactor truck empties its load so that your neighborhood trash can be sorted and then mixed with even more garbage and loaded into bigger trucks. District of Columbia trash is delivered to two different transfer stations, Ft. Totten and Benning Road.

Once the materials have been collected at the transfer stations, the combustible materials are taken to a waste-to-energy facility in Lorton, VA. These items are burned at very high tempera-

tures. The heat generated is recaptured and turned into power. The resulting ash is landfilled.

The materials that are not combustible are taken to private landfills. At each landfill, a scale weighs the truck on its way in. The truck is sent to the area of the landfill that is currently accepting waste; this is called the open cell of the landfill. At this cell, the truck dumps its load. The truck then drives back over the scale and weighs in again. The difference between the first weight and the second is the amount of trash that was left at the landfill. The hauling company or District is billed to dispose of waste based on this weight.

Meanwhile, heavy equipment moves the waste around to fill the cell and drives over it to smash it down, pushing out more of the air. At the end of each day, the trash is covered with soil or another material so that paper and other lightweight materials don't blow away.

Once the trash is buried, it sits in the landfill for a very long time. Modern landfills are made to keep as much rain water as possible from flowing down into the waste. As a result, most items don't begin to rot right away. In fact, scientists who have dug up old landfills found 50-year-old newspapers that could still be read!

Attention, Teachers!

SWEEP JR—Urban Ecology Program

The SWEEP JR—Urban Ecology Program educates students about their responsibilities as part of a larger urban ecosystem. The Urban Ecology Program addresses these issues: reducing everyday solid waste production at school and at home; proper household hazardous waste disposal; composting to manage green waste; and urban storm water runoff pollution. In the Urban Ecology Program, several complementary educational elements help to illustrate the interconnections between these issues.

This comprehensive approach challenges students to rethink their daily actions and analyze their impacts on our environment. The program leads

students—and their families—to understand and participate in the District's "Litter" and "Clean City" initiatives and to comply with D.C. Law 7-226, the D.C. Solid Waste Management and Multi-Material Recycling Act of 1988. ***Under this law all residents and schools in the District of Columbia are required to recycle.***

Project Learning Tree

Project Learning Tree (PLT) is designed for use by teachers and other educators with students in pre-school through 12th grade. PLT helps students understand the world around them as well as their place within it, preparing students to make wise decisions about conservation practices and resource use. PLT is a comprehensive environmental cur-

Answers to your recycling questions

What is the difference between "reuse" and "recycling"?

Reuse means utilizing the product as is for the same or a different purpose. For instance, using washable, cloth napkins is a form of reuse. Refilling water bottles is another. Turning baby food jars into odds-and-ends holders is a third.

Recycling involves transforming the used product into a new product. During recycling, the original product may be crushed, shredded, melted, mixed with new ingredients, or more. For example, used glass jars are broken, melted, and mixed with raw materials before being poured into new glass molds. Plastic jugs can be shredded and melted to be turned into fabric that will make new T-shirts or fleece sweatshirts.

What does the recycling symbol on plastic bottles mean?

The chasing-arrows symbol on the bottom of plastic bottles, containers, and bags isn't a recycling symbol. It's a code that tells you what "recipe" was used to make that type of plastic. Plastic containers are coded with numbers one through seven, as well as letters that are abbreviations for the name of the type of plastic. The symbol does not necessarily mean that the container is locally recyclable or contains recycled content. Instead, use the code to determine whether the container might be recyclable—remember that only ♻ and ♻ narrow-necked containers are locally recyclable.

Why do I need to empty and rinse my containers?

Containers that aren't emptied can leak out a sticky, gooey mess. Whether the mess is mostly jelly or mostly laundry detergent, you don't want it on the floor of your closet or garage or the trunk of your car. Plus, the contents of containers—from soup to ketchup to soft drinks—can attract bugs, bees, rodents, and larger animals, such as cats, dogs, and raccoons. First, these intruders can create a nuisance. Second, they can leave behind a littered mess. And finally, animals could be injured on sharp edges or could ingest plastics, which can create dangerous intestinal blockages.

It's easy to avoid these problems. Simply use clear water to rinse all residue from your containers. Turn them upside down in the sink to let the water drain out. Then, place them into your recycling container.

riculum. It looks at land, air, and water. PLT activities incorporate important lessons about the environment into every subject area—science, language arts, social studies, reading, math, art, and music.

PLT provides ready-made, hands-on, action-oriented lessons and activities that can easily and quickly be incorporated into busy classrooms. The curriculum is "classroom friendly," requiring minimal preparation on your part and little, if any, equipment. PLT also offers workshops and in-service programs for teachers.

To participate in either of these programs or for more information, please contact our office at 202-645-8245 and ask to speak with an education specialist.